



# Radio Frequency Identification (RFID) Applications for the Future Focused Logistics Environment



The Combat Feeding Directorate (CFD) RFID Program is exploring the expanded use of passive, semi-passive and active RFID technologies to enhance asset visibility, improve inventory management, and provide a higher degree of supply chain security.

## Technology:

With the growth of RFID technology in both commercial and military supply chains, CFD is investigating the expanded use of environmental sensors integrated with RFID tags. The extensive experience of CFD in the areas of shelf-life modeling, time-temperature integrators, and biosensors will be leveraged to dramatically enhance the capabilities of this revolutionary technology.

## Benefits:

**Passive RFID:** The CFD Global Asset Visibility program introduced passive RFID as a technology to potentially revolutionize DoD logistics by providing total asset visibility at the pallet, case, and even item level. By demonstrating the use of passive RFID in an end-to-end supply chain, CFD laid the groundwork for the recent DoD policy that mandates the use of passive RFID for asset visibility. CFD continues to provide advice and assistance to both government and commercial implementers of passive RFID.

**Semi-Passive RFID:** CFD also pioneered the use of temperature sensor-equipped semi-passive RFID tags to measure and record ambient storage temperature throughout distribution, and to automatically calculate the remaining shelf-life of combat rations. Continuing work by CFD will result in the development and deployment of an automated inspection process using this technology and the integration of computer shelf life models with the veterinary food inspection information system. This technology will result in considerable logistics savings by streamlining the inspection process, improving inventory management, and reducing loss product loss.

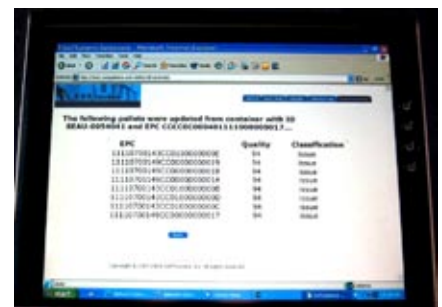
**Active RFID:** To provide a higher degree of supply chain security for Class 1 supplies, CFD is exploring the use of RFID-based container security devices, and will follow-on with the integration of bio-chemical sensors with RFID tags. These technologies will enhance security by providing evidence of possible tampering and by indicating the presence of either intentional or incidental contamination.

## Point of Contact:

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rev 8-26-05  
PAO 03-205